UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,397	01/17/2002	Scott B. Marovich	10003530-1	9611

7590   09/08/2005

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EXAMINER
ISMAIL, SHAWKI SAIF

ART UNIT	PAPER NUMBER
2155	

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/051,397	MAROVICH, SCOTT B.
	Examiner	Art Unit	
	Shawki S. Ismail	2155	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 June 2005</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-25</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-25</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

RESPONSE TO AMENDMENT

1.   This communication is in response to the amendment received on June 24,

2005. Claims 1-25 are pending.

2.   Applicant's arguments, filed June 24, 2005, with respect to the rejection(s) of

claim(s) 1-25 under 35 USC 102 have been fully considered and are persuasive.

Therefore, the rejection has been withdrawn. However, upon further consideration, a

new ground(s) of rejection is made.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a
> whole would have been obvious at the time the invention was made to a person having
> ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

4.   Claim 1-25 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Connery et al., (Connery) U.S Patent No. **6,570,884** and in view of **Oberman et al.,**

(Oberman) U.S. Patent Application No. **2002/0118640** and further in view of **Dixon** U.S.

Patent No. **6,289,461**.

5.   As to claim 1, Connery teaches a network interface for processing incoming

messages sent by a client device to a server, comprising:

Connery teaches a FIFO buffer coupled to the port that receives incoming

packets (see abstract). Connery does not explicitly teach wherein a First-In-First-Out

(FIFO) buffer adapted to assemble the incoming messages from a serial to a parallel form.

Oberman teaches a dynamic system and method for routing data packets through a network switch. Oberman further teaches wherein a FIFO buffer performs serial to parallel conversion on an incoming packet (paragraph 0051).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the teaching of Oberman into the invention of Connery in order to allow data received from the network in bit or byte-serially to be processed by computers in byte- (or word-) parallel form.

Connery teaches a regular-expression pattern matching circuit connected to the FIFO buffer, the regular-expression pattern matching circuit adapted to, concurrent with the assembly of the incoming messages, recognize message headers embedded in the incoming messages, parse recognized message headers into parsed message headers, and provide the parsed message headers to the server (col. 4, lines 10-36, col. 6, lines 43-57).

Connery does not explicitly teach wherein the message headers are Hypertext transfer protocol HTTP message headers.

In an analogous system Dixon, teaches wherein a HTTP message requests are received from a client at a server interface. Server includes a buffer. The request include header information which identifies it as HTTP request and are forwarded to the sever for corresponding response (col. 4, line 66 – col. 5, line 14).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the teaching of Dixon's HTTP message headers into the invention of Connery in order to use it in World Wide Web environment of the Internet and that management of HTTP message header is much easier.

6.   As to claim 2, Connery teaches the network interface as claimed in claim 1 further including: a logic circuit connected to the FIFO buffer, the logic circuit adapted to provide a response message to the client device based on a content of the recognized message headers (col. 1, lines 13-21, col. 6, line 58 – col. 7, line 10).

7.   As to claim 3, Connery teaches the network interface as claimed in claim 1 wherein: the regular-expression pattern matching circuit is further adapted to provide to the server the parsed message headers in a compact form (see Fig. 3, col. 5, lines 38-58).

8.   As to claim 4, Connery teaches the network interface as claimed in claim 1 wherein: the regular-expression pattern matching circuit is further adapted to provide to the server incoming messages that cannot be recognized by the regular-expression pattern matching circuit (see Fig. 3, col. 5, lines 38-58).

9.   As to claim 5, Connery teaches the network interface as claimed in claim 1 wherein: the regular-expression pattern matching circuit is implemented by a technique consisting of hardware, software, and a combination thereof (see Fig. 3).

10.   As to claim 6, Connery teaches the network interface as claimed in claim 1 wherein: the HTTP message headers include HTTP cookies (col. 1, lines 13-24).

11.   As to claim 7, Connery teaches a network interface for processing incoming

messages sent by a client device to a server, comprising:

Connery teaches a FIFO buffer coupled to the port that receives incoming

packets (see abstract). Connery does not explicitly teach wherein a First-In-First-Out ·

(FIFO) buffer adapted to assemble the incoming messages from a serial to a parallel

form.

Oberman teaches a dynamic system and method for routing data packets

through a network switch. Oberman further teaches wherein a FIFO buffer performs

serial to parallel conversion on an incoming packet (paragraph 0051).

It would have been obvious to one of ordinary skill in the art at the time of

applicant's invention to incorporate the teaching of Oberman into the invention of

Connery in order to allow data received from the network in bit or byte-serially to be

processed by computers in byte- (or word-) parallel form.

Connery teaches a regular-expression pattern matching circuit connected to the

FIFO buffer, the regular-expression pattern matching circuit adapted to, concurrent with

the assembly of the incoming messages, recognize message headers embedded in the

incoming messages, parse recognized message headers into parsed message

headers, and provide the parsed message headers to the server (col. 4, lines 10-36,

col. 6, lines 43-57).

Connery does not explicitly teach wherein the message headers are Hypertext

transfer protocol HTTP message headers.

In an analogous system Dixon, teaches wherein a HTTP message requests are received from a client at a server interface. Server includes a buffer. The request include header information which identifies it as HTTP request and are forwarded to the sever for corresponding response (col. 4, line 66 – col. 5, line 14).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the teaching of Dixon's HTTP message headers into the invention of Connery in order to use it in World Wide Web environment of the Internet and that management of HTTP message header is much easier.

Wherein:

the HTTP message headers include HTTP cookies (col. 1, lines 13-24); and

the regular-expression pattern matching circuit is implemented by a technique consisting of hardware, software, and a combination thereof (see Fig. 3). and

a logic circuit connected to the FIFO buffer, the logic circuit adapted to provide a response message to the client device based on a content of the recognized message headers (col. 1, lines 13-21, col. 6, line 58 – col. 7, line 10).

12.   As to claim 8, Connery teaches a server for providing services to a client device, comprising:

a central processing unit (CPU) (see Fig. 2);

a bus connected to the CPU (see Fig. 2);

a memory connected to the bus, the memory having a server application program stored therein (see Fig. 2); and

a network interface for processing incoming messages sent by the client device

to the server, the network interface including:

Connery teaches a FIFO buffer coupled to the port that receives incoming

packets (see abstract). Connery does not explicitly teach wherein the First-In-First-Out

(FIFO) buffer adapted to assemble the incoming messages from a serial to a parallel

form.

Oberman teaches a dynamic system and method for routing data packets

through a network switch. Oberman further teaches wherein a FIFO buffer performs

serial to parallel conversion on an incoming packet (paragraph 0051).

It would have been obvious to one of ordinary skill in the art at the time of

applicant's invention to incorporate the teaching of Oberman into the invention of

Connery in order to allow data received from the network in bit or byte-serially to be

processed by computers in byte-(or word-) parallel form.

Connery teaches a regular-expression pattern matching circuit connected to the

FIFO buffer, the regular-expression pattern matching circuit adapted to, concurrent with

the assembly of the incoming messages, recognize message headers embedded in the

incoming messages, parse recognized message headers into parsed message

headers, and provide the parsed message headers to the server (col. 4, lines 10-36,

col. 6, lines 43-57).

Connery does not explicitly teach wherein the message headers are Hypertext

transfer protocol HTTP message headers.

In an analogous system Dixon, teaches wherein a HTTP message requests are received from a client at a server interface. Server includes a buffer. The request include header information which identifies it as HTTP request and are forwarded to the sever for corresponding response (col. 4, line 66 – col. 5, line 14).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the teaching of Dixon's HTTP message headers into the invention of Connery in order to use it in World Wide Web environment of the Internet and that management of HTTP message header is much easier.

13.   As to claim 9, Connery teaches the server as claimed in claim 8 further including: a logic circuit connected to the FIFO buffer, the logic circuit adapted to provide a response message to the client device based on a content of the recognized message headers (col. 1, lines 13-21, col. 6, line 58 – col. 7, line 10).

14.   As to claim 10, Connery teaches the server as claimed in claim 8 wherein: the regular-expression pattern matching circuit is further adapted to provide to the server the parsed message headers in a compact form (see Fig. 3, col. 5, lines 38-58).

15.   As to claim 11, Connery teaches the server as claimed in claim 8 wherein:

the regular-expression pattern matching circuit is further adapted to provide to the server incoming messages that cannot be recognized by the regular-expression pattern matching circuit (see Fig. 3, col. 5, lines 38-58).

16.   As to claim 12, Connery teaches the server as claimed in claim 8 wherein:

the HTTP message headers include HTTP cookies (col. 1, lines 13-24).

17.   As to claim 13, Connery teaches a server for providing services to a client

device, comprising:

    a central processing unit (CPU) (see Fig. 2);

    a bus connected to the CPU (see Fig. 2);

    a memory connected to the bus, the memory having a server application

program stored therein (see Fig. 2); and

    a network interface for processing incoming messages sent by the client device

to the server, the network interface including:

    Connery teaches a FIFO buffer coupled to the port that receives incoming

packets (see abstract). Connery does not explicitly teach wherein a First-In-First-Out

(FIFO) buffer adapted to assemble the incoming messages from a serial to a parallel

form.

    Oberman teaches a dynamic system and method for routing data packets

through a network switch. Oberman further teaches wherein a FIFO buffer performs

serial to parallel conversion on an incoming packet (paragraph 0051).

    It would have been obvious to one of ordinary skill in the art at the time of

applicant's invention to incorporate the teaching of Oberman into the invention of

Connery in order to allow data received from the network in bit or byte-serially to be

processed by computers in byte-(or word-) parallel form.

    Connery teaches a regular-expression pattern matching circuit connected to the

FIFO buffer, the regular-expression pattern matching circuit adapted to, concurrent with

the assembly of the incoming messages, recognize message headers embedded in the

incoming messages, parse recognized message headers into parsed message headers, and provide the parsed message headers to the server (col. 4, lines 10-36, col. 6, lines 43-57).

Connery does not explicitly teach wherein the message headers are Hypertext transfer protocol HTTP message headers.

In an analogous system Dixon, teaches wherein a HTTP message requests are received from a client at a server interface. Server includes a buffer. The request include header information which identifies it as HTTP request and are forwarded to the sever for corresponding response (col. 4, line 66 – col. 5, line 14).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the teaching of Dixon's HTTP message headers into the invention of Connery in order to use it in World Wide Web environment of the Internet and that management of HTTP message header is much easier.

the HTTP message headers include HTTP cookies, and the regular-expression pattern matching circuit is implemented by a technique consisting of hardware, software, and a combination thereof (see Fig. 3).), and

a logic circuit connected to the FIFO buffer, the logic circuit adapted to provide a response message to the client device based on a content of the recognized message headers (col. 1, lines 13-21, col. 6, line 58 – col. 7, line 10).

18.   As to claim 14, Connery teaches a communications network, comprising:

a client device (see Fig.1, 2);

and a server connected to the client device for providing services to the client

device (see Fig. 1, 2), the server including:

a central processing unit (CPU) (see Fig. 2),

a bus connected to the CPU (see Fig. 2),

a memory connected to the bus, the memory having a server application

program stored therein, and a network interface for processing incoming messages sent

by the client device to the server (see Fig. 2), the network interface including:

Connery teaches a FIFO buffer coupled to the port that receives incoming

packets (see abstract). Connery does not explicitly teach wherein a First-In-First-Out

(FIFO) buffer adapted to assemble the incoming messages from a serial to a parallel

form.

Oberman teaches a dynamic system and method for routing data packets

through a network switch. Oberman further teaches wherein a FIFO buffer performs

serial to parallel conversion on an incoming packet (paragraph 0051).

It would have been obvious to one of ordinary skill in the art at the time of

applicant's invention to incorporate the teaching of Oberman into the invention of

Connery in order to allow data received from the network in bit or byte-serially to be

processed by computers in byte-(or word-) parallel form.

Connery teaches a regular-expression pattern matching circuit connected to the

FIFO buffer, the regular-expression pattern matching circuit adapted to, concurrent with

the assembly of the incoming messages, recognize message headers embedded in the

incoming messages, parse recognized message headers into parsed message

headers, and provide the parsed message headers to the server (col. 4, lines 10-36, col. 6, lines 43-57).

Connery does not explicitly teach wherein the message headers are Hypertext transfer protocol HTTP message headers.

In an analogous system Dixon, teaches wherein a HTTP message requests are received from a client at a server interface. Server includes a buffer. The request include header information which identifies it as HTTP request and are forwarded to the sever for corresponding response (col. 4, line 66 – col. 5, line 14).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the teaching of Dixon's HTTP message headers into the invention of Connery in order to use it in World Wide Web environment of the Internet and that management of HTTP message header is much easier.

19.   As to claim 15, Connery teaches the communications network as claimed in claim 14 further including:

a logic circuit connected to the FIFO buffer, the logic circuit adapted to provide a response message to the client device based on a content of the recognized message headers (col. 1, lines 13-21, col. 6, line 58 – col. 7, line 10).

20.   As to claim 16, Connery teaches the communications network as claimed in claim 14 wherein:

the regular-expression pattern matching circuit is further adapted to provide to the server the parsed message headers in a compact form (see Fig. 3, col. 5, lines 38-58).

21.   As to claim 17, Connery teaches the communications network as claimed in

claim 14 wherein:

the regular-expression pattern matching circuit is further adapted to provide to

the server incoming messages that cannot be recognized by the regular-expression

pattern matching circuit (see Fig. 3, col. 5, lines 38-58).

22.   As to claim 18, Connery teaches the communications network as claimed in

claim 14 wherein:

the HTTP message headers include HTTP cookies (col. 1, lines 13-24).

23.   As to claim 19, Connery teaches a communications network comprising:

a client device (see Fig. 1, 2); and

a server connected to the client device for providing services to the client device

(see Fig. 1, 2), the server including:

a central processing unit (CPU), a bus connected to the CPU (see Fig. 2)

a memory connected to the bus, the memory having a server application

program stored therein (see Fig. 2), and

a network interface for processing incoming messages sent by the client device

to the server, the network interface including:

Connery teaches a FIFO buffer coupled to the port that receives incoming

packets (see abstract). Connery does not explicitly teach wherein a First-In-First-Out

(FIFO) buffer adapted to assemble the incoming messages from a serial to a parallel

form.

Oberman teaches a dynamic system and method for routing data packets through a network switch. Oberman further teaches wherein a FIFO buffer performs serial to parallel conversion on an incoming packet (paragraph 0051).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the teaching of Oberman into the invention of Connery in order to allow data received from the network in bit or byte-serially to be processed by computers in byte-(or word-) parallel form.

Connery teaches a regular-expression pattern matching circuit connected to the FIFO buffer, the regular-expression pattern matching circuit adapted to, concurrent with the assembly of the incoming messages, recognize message headers embedded in the incoming messages, parse recognized message headers into parsed message headers, and provide the parsed message headers to the server (col. 4, lines 10-36, col. 6, lines 43-57).

Connery does not explicitly teach wherein the message headers are Hypertext transfer protocol HTTP message headers.

In an analogous system Dixon, teaches wherein a HTTP message requests are received from a client at a server interface. Server includes a buffer. The request include header information which identifies it as HTTP request and are forwarded to the sever for corresponding response (col. 4, line 66 – col. 5, line 14).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the teaching of Dixon's HTTP message headers into

the invention of Connery in order to use it in World Wide Web environment of the

Internet and that management of HTTP message header is much easier.

wherein:

the HTTP message headers include HTTP cookies (col. 1, lines 13-24)., and

the regular-expression pattern matching circuit is implemented by a technique

consisting of hardware, software, and a combination thereof (see Fig. 3)., and

a logic circuit connected to the FIFO buffer, the logic circuit adapted to provide a

response message to the client device based on a content of the recognized message

headers (col. 1, lines 13-21, col. 6, line 58 – col. 7, line 10)..

24.   As to claims 20-25, they contain similar limitations as seen above; therefore, they

are rejected under the same rational

Response to Arguments

25.   Applicant's arguments, filed June 24, 2005, with respect to the rejection(s) of

claim(s) 1-25 under 35 USC 102 have been fully considered. The examiner has

attempted to respond to the remarks in the body of the Office Action.

Contact Information

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Shawki S Is mail whose telephone number is 571-272-

3985. The examiner can normally be reached on M-F 8:30 - 5:00.
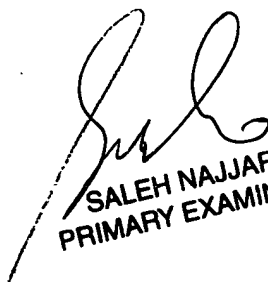
If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Sale Ajar can be reached on 571-272-4006. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shaky Is mail
Patent Examiner
September 2, 2005

/SALEH NAJJAR
PRIMARY EXAMINER